UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,287	03/08/2005	Klemens Breitfuss	AT02 0058 US	2726

65913 7590 06/04/2008

NXP, B.V.
NXP INTELLECTUAL PROPERTY DEPARTMENT
M/S41-SJ
1109 MCKAY DRIVE
SAN JOSE, CA 95131

EXAMINER	
SYED, NABIL H	

ART UNIT	PAPER NUMBER
2612	

NOTIFICATION DATE	DELIVERY MODE
06/04/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/527,287	BREITFUSS ET AL.	
	Examiner	Art Unit	
	NABIL H. SYED	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The following office action is in response to the RCE filed 3/27/08. Amendments received on 3/27/08 have been entered. Claims 1-23 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 8, 12 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. As of claims 1, 8, 12 and 16, recite the limitation "a predefined moment". This limitation is not defined in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by

> the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Ooya et al. (7,187,692).

As of claim 1, Ooya discloses a method of inventorying data carriers by means of a communication station (via a master station communicating data with slave stations; see abstract),

wherein communication station (via a master station 101; see fig. 2) and each data carrier (via a slave station 201; see fig. 2) are brought into communicative connection (see col. 3, lines 61-67; see fig. 2), and

wherein each data carrier brought into communicative connection with the communication station generates a response signal enabling the inventorying of the data carrier after at least one operational condition has been fulfilled (via slave station generating electromagnetic force using the antenna 209 to power the circuit in the slave station and generating a response signal; see col. 4, lines 3-7) and supplies response

signal using a transmission start moment that can be chosen from a plurality of transmission start moments (via slave station comprising time number generation unit 207 to generate time slot numbers and time delay numbers which are used in transmitting the response signal to the master station; see col. 4, lines 27-43) wherein each of the transmission start moments results from a sum of a common selectable discrete time period and a number of waiting time periods from the predefined moment, where the number of waiting time periods is defined from the end of the common selectable discrete time period (Note: from the figure 3 of Ooya it can be seen that Master station 101 transmits a signal 191 to the slave stations (301, 401, 501, 601) and then there is time delay (a common selectable discrete time period) between the transmitted signal 191 and a first slot 1, which is interpreted by the Examiner as common discrete time period, this time delay can be selected by the person who programs the communication system of Ooya) and after that time period each slave station wait until their slot number (number of waiting time periods) to transmit its identification to the Master station; see fig. 3; also see col. 33-557) (Note: it is inherent in the transponder reader system that all the data carriers wait a certain time period before start the transmission of the identification data. As it is seen in fig. 3, after receiving the ID request signal 191 there is a time delay between the first time slot and the received signal 191, hence this time delay can also be referred as common discrete delay period, since each data carrier has this delay before going to the next step which is to wait for their slot number) and after that an extra time delays in each time slot is waited (number of waiting time periods) (see fig. 3; also see col. 4, lines 44-57), and

wherein each data carrier before providing its response signal tests whether another data carrier is already providing its response signal, and wherein each data carrier discontinues the provision of its response signal if another data carrier is already giving its response signal (via slave stations checking if other slave station is transmitting a response signal and refraining from transmitting a response if any other slave station is transmitting; see col. 4, lines 51-67).

As of claim 2, Ooya discloses a method wherein each data carrier already before generating its response signal tests whether another data carrier is giving its response signal, and wherein each data carrier discontinues the generation of its response signal if another data carrier is already giving its response signal (via slave station refraining from transmission if other slave station is transmitting; see col. 4, lines 51-67).

As of claim 3, Ooya discloses a method wherein the response signal given is an identification signal (see col. 5, lines 23-26).

As of claim 4, Ooya discloses a method wherein the number of waiting periods is selected by a random principle (via generation of time numbers using a random number generation circuit; see col. 6, liens 62-65).

As of claim 5, Ooya discloses a method wherein the predefined moment is at a end of a command signal given by the communication station (via the data carrier waiting for a time slot number and a time delay number (predefined moement) before transmitting the id; see col. 4, lines 33-43).

As of claim 6, Ooya discloses a method wherein the number wherein the numbers of selectable transmission start moments is greater than the number of data

carriers (Note: Ooya discloses that the number of time slots and time delay can be freely selected, hence number of time slots and time delay can be greater than the slave station 201; see col. 8, lines 40-42).

As of claim 7, Ooya discloses a method wherein a data carrier that has given a response signal cart be sot to an idle station by the communication station, in which idle state no response signal is provided (via slave station not transmitting the response signal after transmitting the ID response signal to the master station; see col. 5, lines 39-42).

As of claim 8 and 12, Ooya discloses a data carrier (via a slave station 201, see fig. 2) which data carrier is designed for contactless communication with a communication station and which comprises an integrated circuit (Note: Ooya discloses that all the elements in slave station can be provided on a single chip; see col. 8, lines 43-50), which integrated circuit comprises the following means: response signal generation means for generating a response signal (via slave station 201 using the control unit 202 to generate a response signal to the master station 101; see col. 4, lines 22-23) start moment selection means by which a transmission start moment can be selected from a plurality of transmission start moments (via time number generation unit 207 allowing the control unit to generate time slot numbers and time delay numbers; see col. 4, lines 27-32), wherein each of the transmission start moments results from a sum of a common selectable discrete time period and a number of waiting time periods from the predefined moment, where the number of waiting time periods is defined from the end of the common selectable discrete time period (Note:

from the figure 3 of Ooya it can be seen that Master station 101 transmits a signal 191 to the slave stations (301, 401, 501, 601) and then there is time delay (a common selectable discrete time period) between the transmitted signal 191 and a first slot 1, which is interpreted by the Examiner as common discrete time period, this time delay can be selected by the person who programs the communication system of Ooya) and after that time period each slave station wait until their slot number (number of waiting time periods) to transmit its identification to the Master station; see fig. 3; also see col. 33-557) .(Note: it is inherent in the transponder reader system that all the data carriers wait a certain time period before start the transmission of the identification data. As it is seen in fig. 3, after receiving the ID request signal 191 there is a time delay between the first time slot and the received signal 191, hence this time delay can also be referred as common discrete delay period, since each data carrier has this delay before going to the next step which is to wait for their slot number) and after that an extra time delays in each time slot is waited (number of waiting time periods), and

response signal recognition means designed for recognizing a response signal given by another data carrier (via slave stations having level comparators 210 which judges whether the detected signal is from the another slave station; see col. 7, lines 43-59; also see fig. 7) and for generating and delivering a response signal recognition signal and wherein delivery decision means are provided which release or block a delivery of the response signal in dependence on the response signal recognition signal and the transmission start moment (via slave station not transmitting the response signal if the other slave station is transmitting; see col. 4, lines 59-67 and col. 7, lines 60-67). Oodya

further discloses that all the circuit elements in each slave station may be provided on a single IC chip (an integrated circuit) (see col. 8, lines 43-50).

As of claim 9 and 13, Ooya discloses a data carrier (via a slave station 201) wherein the response signal generation means are formed by identification signal generation means (via slave station transmitting the ID response signal to the master station 101; see col. 5, lines 23-26).

As of claim 10 and 14, Ooya discloses a data carrier (via a slave station 201) wherein the response signal recognition means are designed for recognizing a carrier signal (via the slave station 201 receiving the modulated signal from the master station; see col. 4, lines 10-14).

As of claim 11 and 15, Ooya discloses wherein the response signal recognition means are designed for rccogni2ing a modulated carrier signal and for this purpose comprise demodulation means which are designed for demodulating a modulated carrier signal (via the slave station 201 comprising a demodulation unit 204 to demodulate the modulated signal received from the master station 101; see col. 4, lines 15-19; also see fig. 2).

As of claim 16, Ooya discloses a method of inventorying data carrier which method comprising the following steps:

choosing from a plurality of transmission start moments that are defined from a predefined moment , transmission start moment for starting a transmission of a carrier signal for the purpose of supplying data to a communication station during the transmission of carrier signal wherein the data enable the inventory of the data carrier

(via the slave station 201 generating the time slot number and time delay using the time number generation unit 207 before transmitting the ID response signal back to the master station; see col. 6, lines 12-14), wherein each of the transmission start moments results from a sum of a common selectable discrete time period and a number of waiting time periods from the predefined moment, where the number of waiting time periods is defined from the end of the common selectable discrete time period (Note: from the figure 3 of Ooya it can be seen that Master station 101 transmits a signal 191 to the slave stations (301, 401, 501, 601) and then there is time delay (a common selectable discrete time period) between the transmitted signal 191 and a first slot 1, which is interpreted by the Examiner as common discrete time period, this time delay can be selected by the person who programs the communication system of Ooya) and after that time period each slave station wait until their slot number (number of waiting time periods) to transmit its identification to the Master station; see fig. 3; also see col. 33-557). (Note: it is inherent in the transponder reader system that all the data carriers wait a certain time period before start the transmission of the identification data. As it is seen in fig. 3, after receiving the ID request signal 191 there is a time delay between the first time slot and the received signal 191, hence this time delay can also be referred as common discrete delay period, since each data carrier has this delay before going to the next step which is to wait for their slot number) and after that an extra time delays in each time slot is waited (number of waiting time periods), and

testing whether another data carrier is already transmitting a carrier signal after predefined time and prior to chosen transmission start moment, and inhibiting the

starting of said transmission of said carrier signal at chosen transmission start moment if the result of testing is positive (via the data detection unit 208 detecting if another slave station is transmitting the ID response signal and inhibiting the transmission if the there is another slave station transmitting the ID response signal; see col. 7, lines 9-15; also see fig. 7).

As of claim 17, Ooya discloses a method comprising: starting the transmission of carrier signal at the chosen transmission start moment if result of testing is negative (via the control unit 202 transmitting the ID response signal if no other slave station is transmitting the response signal; see col. 7, lines 16-21).

As of claim 18, Ooya discloses that the slave station transmits the modulated signal back to the master station. Even thought not explicitly said but the slave station of Ooya has to take into account transient phenomena because of the time it takes for the electrical components like of modulation, demodulation and control circuits to move when the voltage is applied to them and there natural switching behavior.

As of claim 19, Ooya discloses a method wherein the transmission start moment is selected by a random principle (via generation of time numbers using a random number generation circuit; see col. 6, liens 62-65).

As of claim 20, Ooya discloses a method wherein the number wherein the numbers of selectable transmission start moments is greater than the number of data carriers (Note: Ooya discloses that the number of time slots and time delay can be freely selected, hence number of time slots and time delay can be greater than the slave station 201; see col. 8, lines 40-42).

As of claim 21, Ooya discloses a method wherein the choosing of the transmission start moment is performed in such a way that predefined moment is defined as the end of a carrier signal transmission of the communication station, the communication station supplied its data representing an inventory command during its carrier signal transmission (via the slave station awaits a command from the master unit and after receiving the command powers up the circuitry of the slave station; see col. 5, lines 56-64).

As of claim 22, Ooya discloses a method wherein the selected transmission start moment is shifted in time by a selectable discrete delay period with respect to a command signal end of a command signal given by the communication station (via time number generation unit generating time delay in each time slot; see col. 4, lines 33-43).

As of claim 23, Ooya discloses a method wherein a data carrier that has given a response signal cart be sot to an idle station by the communication station, in which idle state no response signal is provided (via slave station not transmitting the response signal after transmitting the ID response signal to the master station; see col. 5, lines39-42).

Response to Arguments

7. Applicant's arguments filed 3/27/08 have been fully considered but they are not persuasive. As of claim 1, applicant argues that Ooya does not disclose that "wherein each of the transmission start moments results from a sum of a common *selectable*

discrete time period and a number of waiting time periods from the predefined mement,".

From the figure 3 of Ooya it can be seen that Master station 101 transmits a signal 191 to the slave stations (301, 401, 501, 601) and then there is time delay (a common selectable discrete time period) between the transmitted signal 191 and a first slot 1, which is interpreted by the Examiner as common discrete time period, this time delay can be selected by the person who programs the communication system of Ooya) and after that time period each slave station wait until their slot number (number of waiting time periods) to transmit its identification to the Master station; see fig. 3; also see col. 33-557). (Note: it is inherent in the transponder reader system that all the data carriers wait a certain time period before start the transmission of the identification data. As it is seen in fig. 3, after receiving the ID request signal 191 there is a time delay between the first time slot and the received signal 191, hence this time delay can also be referred as common discrete delay period, since each data carrier has this delay before going to the next step which is to wait for their slot number) and after that an extra time delays in each time slot is waited (number of waiting time periods).

Applicant further argues that “extra time delays are defined from the beginning of each time slot, not “from the end of the common selectable discrete time period.” The Examiner respectfully disagrees. From the figure 3 of Ooya, Time slots and time delays within time slots are generated at the end of the delay period (from received signal 191 to the time slot 1; see fig. 3).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NABIL H. SYED whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabil H Syed
Examiner
Art Unit 2612

N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612